

XLII.—*New Coleoptera in the British Museum.*

By CHARLES O. WATERHOUSE.

Dynastidæ.

Heteronychus simplex, n. sp.

Niger, bene convexus, nitidus, subtus piceus; thoracis lateribus laxè subtiliter punctulatis; elytris sat fortiter punctato-striatis, apicè crebre punctato; pygidio sat fortiter punctato, medio apiceque fere lævibus; pedibus nigro-piceis, tarsis piceis, tibiæ coronæ apicali spinis circiter quinque instructa.

Long. 6–7 lin.

Very similar to *H. arator*, Fabr., but with fewer spines at the apex of the posterior tibiæ. Head finely rugulose. Thorax one third broader than long, parallel at the sides, arcuately narrowed in front; punctuation very fine, not very close (often obscure); the punctures at the posterior angles distinct, and at the anterior angles rather strong. Scutellum smooth. Elytra with the sutural stria strongly marked, closely punctured. Each elytron with eight lines of distinct punctures; the intervals between them nearly equal; the first line is entire; the second does not quite reach the apex; the third and fourth terminate at one quarter from the apex; the fifth and sixth lose themselves in the apical punctuation; the seventh and eighth are composed of distinct punctures near the shoulder, but posteriorly the punctures are extremely fine and the line is apt to be broken. There are generally a few punctures on the first interstice. The apex is moderately, closely, and strongly punctured. The two lines which form the stridulating-organ on the propygidium are very distinct, nearly parallel, and a little less than one millimetre apart. At the apex of the posterior tibiæ there are the usual two strong spines at the lower angle, and two long, very slender spines at the upper angle; on the outer margin there are five not very long, stout, lanceolate spines.

Hab. China (*J. C. Bowering, Esq.*).

Cetoniidæ.

Pæcilopharis uniformis, n. sp.

Allied to *P. emilia*, White, but relatively a little broader. Entirely of an olivaceous-green colour, immaculate. Head finely punctured; the clypeus not impressed in the middle of the front margin, which is nearly straight. Thorax a trifle

broader in front, impunctate, as well as the scutellum. Elytra with five or six lines of shallow punctures (which are open posteriorly), the lines not reaching the apex; the sides of the elytra are posteriorly marked with transverse striæ, as in *P. emilia*. The pygidium more closely striolate than in *P. emilia*. Anterior tibiæ with three acute teeth at the apex, placed close together, parallel to one another, and at right angles to the tibia. Length 10 lines.

This last character will at once distinguish it from its allies.

Hab. Santa Anna, Solomon Islands (*H. B. Guppy*).

Pæcilopharis Curtisii, n. sp.

Allied to the preceding; and, like it, of a uniform colour, except that there is a slight coppery tint in certain lights. The clypeus has a slight impression in the middle of the front margin, which is very slightly emarginate; the punctuation is closer and stronger than in *P. emilia*, and there is a mixture of extremely fine punctuation. Thorax with some excessively fine punctures above, and a few larger ones at the sides. Elytra very smooth, much flattened at the apex, with no lines of punctures, but a few excessively fine punctures may be traced here and there; the apical half of the lateral margin is transversely striolate. The pygidium is rather more strongly and decidedly more closely striolate than in *P. emilia*. The anterior tibiæ have three apical teeth, two approximate at the apex, the third slightly removed from the others. Length 10 lines.

Hab. Batchesian (*C. Curtis*).

This species has the elytra less suddenly declivous at the apex than its allies.

Buprestidæ.

Chalcotænia lata, n. sp.

Valde elongata, nitida, cyanea; thorace rugoso, pallide pollinoso; elytris viridi-cyaneis, quadricostatis, interstitiis flavo-pollinosis.

Long. 21 lin., lat. $7\frac{1}{2}$ lin.

Allied to *C. gigas*, but a little broader, the thorax relatively broader posteriorly. Light sky-blue above, the raised parts on the thorax darker; the whole underside very dark blue, almost black in parts. The thorax has numerous, irregular, raised smooth spots above, the intervals finely punctured. The costæ of the elytra are as in *C. gigas*, but the third one is shorter. The apex of each elytron has four or five acute teeth, but the sutural angle is scarcely more produced than the other teeth. The underside is shining, with very numerous

small (generally elongate) marks, which are finely punctured, and generally filled with yellow pollen. The under flanks of the prothorax, the sides of the metasternum, the metathoracic epipleura, and the sides of the basal segment of the abdomen are not densely and finely punctured as they are in *C. gigas*.

Hab. Queensland.

Erotyliidæ.

Aulacochilus humeralis, n. sp.

Ovate, very convex, shining, black. Each elytron with two large yellow spots, the basal one occupying all the shoulder, nearly touching the scutellum, but leaving the narrow reflexed lateral margin black; the spot is oblique on its inner margin and trisinate posteriorly. The second spot is behind the middle, transverse, lunate. The head is very distinctly and moderately thickly punctured. The thorax is narrowed in front, finely but distinctly and moderately closely punctured. The sides are rather straight (as compared with allied species), the margins strongly incrassate; the incrassate margin much wider at the anterior angles; the anterior angles rather prominent. The elytra are very delicately striate-punctate, the intervals obscurely punctured. Length $4\frac{1}{2}$ lines.

Hab. Pasamanca, Philippine Islands ('*Challenger*' *Exped.*).

This species is allied to *A. quadrisignatus*; but is quite black, more convex, the thorax straighter at the sides, with more incrassate lateral margins, and the humeral spot of the elytra does not leave a black spot on the callus.

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XLIII.—Remarks on the *Gastræa*-Theory.

By G. BÜTSCHLI*.

[Plate XV.]

IN the sphere of speculation on the Metazoa as regards their developmental history and phylogensis the explanation of the probable origin of the primitive bilamellar form has hitherto formed a principal difficulty. Hence, of course, the conception which one must form of the general morphology of this first bilamellar Metazoan form has also varied.

* Translated by W. S. Dallas, F.L.S., from the '*Morphologisches Jahrbuch*' (1884), Band ix. pp. 415-427.